4160-01-P

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA-2011-D-0800]

Draft Guidance for Industry on Regulatory Classification of Pharmaceutical Co-Crystals;

Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a draft guidance for industry entitled "Regulatory Classification of Pharmaceutical Co-Crystals." This draft guidance provides applicants of new drug applications (NDAs) and abbreviated new drug applications (ANDAs) with the Center for Drug Evaluation and Research's (CDER's) current thinking on the appropriate classification of co-crystal solid-state forms. This draft guidance also provides information about the data that should be submitted to support the appropriate classification of a co-crystal and the regulatory implications of the classification.

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work on the final version of the guidance, submit either electronic or written comments on the draft guidance by [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit written requests for single copies of the draft guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, rm. 2201, Silver Spring, MD 20993-0002. Send one self-

addressed adhesive label to assist that office in processing your requests. See the SUPPLEMENTARY INFORMATION section for electronic access to the draft guidance document.

Submit electronic comments on the draft guidance to <a href="http://www.regulations.gov">http://www.regulations.gov</a>.

Submit written comments to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

### FOR FURTHER INFORMATION CONTACT:

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# SUPPLEMENTARY INFORMATION:

### I. Background

FDA is announcing the availability of a draft guidance for industry entitled "Regulatory Classification of Pharmaceutical Co-Crystals." This draft guidance provides applicants of NDAs and ANDAs with CDER's current thinking on the appropriate classification of co-crystal solid-state forms. This draft guidance also provides information about the data that should be submitted to support the appropriate classification of a co-crystal and the regulatory implications of the classification.

Co-crystals are solids that are crystalline materials composed of two or more molecules in the same crystal lattice. These solid-state forms, composed of an active pharmaceutical ingredient (API) with a neutral guest compound co-former, have been the focus of significant interest in drug product development. Pharmaceutical co-crystals have opened the opportunity for engineering solid-state forms designed to have tailored properties to enhance drug product bioavailability and stability, as well as enhance processability of the solid material inputs in drug product manufacture. Pharmaceutical co-crystals are of interest because, unlike a salt form where the components in the crystal lattice are in an ionized state, the molecules in the co-crystal are in a neutral state and interact via nonionic interactions. Thus, pharmaceutical co-crystals offer the advantage of generating a diverse array of solid-state forms, even for APIs that lack ionizable functional groups needed for salt formation.

Traditionally, pharmaceutical solid-state forms of an API are grouped as either polymorphs or salts, and applicable regulatory schemes for these solid-state forms are well-defined. Co-crystals, however, are distinguishable from these traditional pharmaceutical solid-state forms. Unlike polymorphs, which generally speaking contain only the API within the crystal lattice, co-crystals are composed of an API with a neutral guest compound conformer in

the crystal lattice. Similarly, unlike salts, where the components in the crystal lattice are in an ionized state, a co-crystal's components are in a neutral state and interact via nonionic interactions.

At present, no regulatory paradigm exists governing co-crystal forms. In response to this need for regulatory guidance, the draft guidance provides the Agency's current thinking on the appropriate classification of co-crystal solid-state forms.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the Agency's current thinking on regulatory classification of pharmaceutical co-crystals. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

#### II. Comments

Interested persons may submit to the Division of Dockets Management (see ADDRESSES) either electronic or written comments regarding this document. It is only necessary to send one set of comments. It is no longer necessary to send two copies of mailed comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

## III. The Paperwork Reduction Act of 1995

This draft guidance refers to previously approved collections of information found in FDA regulations. This draft guidance refers to information collection provisions that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act

of 1995 (44 U.S.C. 3501-3520). The collections of information in 21 CFR 314.50(d)(1) and 314.94(a)(5) and 314.94(a)(9) have been approved under OMB control number 0910–0001.

# IV. Electronic Access

Persons with access to the Internet may obtain the document at either <a href="http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm">http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm</a> or <a href="http://www.regulations.gov">http://www.regulations.gov</a>.

Dated: November 29, 2011.

Leslie Kux,

Acting Assistant Commissioner for Policy.

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